

CLAIMS

Sub B 1. A pneumatic tire comprising a tread portion provided with at least one circumferential groove extending along a circumferential direction of the tire and a plurality of slant grooves each opening to the circumferential groove and obliquely extending from such an opening position toward a ground contact end of a tread, characterized in that a pseudo-land portion(s) is formed in the circumferential groove so as to promote a smooth inflow of water flowing in the circumferential groove into the slant groove.

SUB C1 2. A pneumatic tire according to claim 1, wherein the pseudo-land portion is formed such that a cross sectional area thereof is gradually increased toward a given circumferential direction of the tire.

a 3. A pneumatic tire according to claim 1 ~~or 2~~, wherein the pseudo-land portion is arranged in the circumferential groove so as to come an end part at a larger side of the cross sectional area of the pseudo-land portion close to the portion of the slant groove opened to the circumferential groove.

a 4. A pneumatic tire according to claim 1, ~~2 or 3~~, wherein the pseudo-land portion is arranged adjacent to a first groove wall of the circumferential groove not opened to the slant groove.

5. A pneumatic tire according to claim 4, wherein the pseudo-land portion is fixed to the first groove wall.

6. A pneumatic tire according to claim 4, wherein the pseudo-land portion is arranged separately from the first groove wall.

7. A pneumatic tire according to ~~any one of claims 1-6~~, wherein the pseudo-land portion has such a part closest to the slant groove opening to the circumferential groove that a height measured from a groove bottom of the circumferential groove is within a range

of 10-60% of a maximum depth of the circumferential groove.

a 8. A pneumatic tire according to ~~any one of claims 1-7~~, wherein the pseudo-land portion has such a slant surface that a height is gradually decreased toward the side of the slant groove opening to the circumferential groove.

9. A pneumatic tire according to claim 8, wherein the slant surface is substantially a flat shape.

10. A pneumatic tire according to claim 8, wherein the slant surface is substantially a curved shape.

11. A pneumatic tire according to claim 10, wherein a center of curvature in the slant surface is located outward from the slant surface in a radial direction of the tire.

12. A pneumatic tire according to claim 10, wherein a center of curvature in the slant surface is located inward from the slant surface in the radial direction of the tire.

a 13. A pneumatic tire according to ~~any one of claims 8-12~~, wherein when the slant surface of the pseudo-land portion is projected onto a ground contact face of the tire, its shape is approximately triangular or trapezoidal.

a 14. A pneumatic tire according to ~~any one of claims 8-13~~, wherein an oblique side opposite to a basic side in the slant surface successively enters in the ground contact face from a side near to a side wall of a rib-shaped land portion toward a side apart therefrom.

a Sub B 15. A pneumatic tire according to ~~any one of claims 8-14~~, wherein when the basic side and the oblique side are projected onto the ground contact face of the tire, the slant surface is isosceles triangular wherein their length are substantially equal to each other and an angle (α) therebetween is within a range of not more than 20°.

a 16. A pneumatic tire according to ~~any one of claims 8-15~~, wherein a position of an intersecting point between the basic side and the oblique side is arranged at a lowest side of the slant surface viewing the tire from a front face.

a 17. A pneumatic tire according to ~~any one of claims 8-16~~, wherein a shape of the oblique side of the slant surface projected onto the ground contact face of the tire is a curved line in which a center of curvature is located outward in a widthwise direction of the tire.

a 18. A pneumatic tire according to ~~any one of claims 8-17~~, wherein the basic side of the slant surface is substantially the same height position as a maximum height position of the first groove wall.

a 19. A pneumatic tire according to ~~any one of claims 8-17~~, wherein the basic side of the slant surface is located inward from the maximum height position of the first groove wall in the radial direction of the tire.

a 20. A pneumatic tire according to ~~any one of claims 1-19~~, wherein a pair of circumferential grooves are arranged in the tread portion to form a rib-shaped land portion between these circumferential grooves.

21. A pneumatic tire according to claim 20, wherein the rib-shaped land portion is continuously arranged in the circumferential direction of the tire.

a 22. A pneumatic tire according to claim 20 ~~or 21~~, wherein the rib-shaped land portion has a center position in the widthwise direction substantially coincident with a pattern center position.

a 23. A pneumatic tire according to claim 20, ~~21 or 22~~, wherein the rib-shaped land portion has a cross angle (θ) between the slant surface and a ground contact face of the rib-shaped land portion or a

005207 5207 5207

phantom plane arranged in parallel to such a ground contact face within a range of 120-150° viewing at a section in the widthwise direction of the tire.

24. A pneumatic tire according to ~~any one of claims 1-23,~~ wherein a corner part of a land portion defined by the arrangements of the circumferential groove, slant grooves and/or tread end at the side of the equatorial plane of the tire is formed at an acute angle and arranged at a position entering in the ground contact region on the heels of the pseudo-land portion.

25. A pneumatic tire according to claim 24, wherein the corner part is arranged on the same circumference of the tire as an intersecting point between a section of the pseudo-land portion having a maximum sectional area and the oblique side of the slant surface or on an extension line of the oblique side.

26. A pneumatic tire according to claim 24 ~~or 25,~~ wherein the corner part is subjected to a chamfering.

27. A pneumatic tire according to claim 26, wherein the corner part is subjected to a chamfering forming a smoothly curved shape.

28. A pneumatic tire according to ~~any one of claims 24-27,~~ wherein the corner part is connected with the pseudo-land portion.

29. A pneumatic tire according to ~~any one of claims 1-28,~~ wherein the slant groove opening to the circumferential groove is arranged so as to separate away from the circumferential groove toward a given circumferential direction of the tire.

30. A pneumatic tire according to ~~any one of claims 1-29,~~ wherein all of the slant grooves each opening to each of the pair of circumferential grooves and extending toward the respective ground contact end of the tread are arranged in a direction of successively

entering in the ground contact face from the side of the circumferential groove toward the side of the ground contact end to thereby form a directional pattern in the tread portion.

add B⁴

005207" 6E04/950